2005 AMD Analyst Day

Phil Hester
Corporate Vice President &
Chief Technology Officer

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Top Priority: Improving the End-User Experience (EUE)

- AMD's technology imperative: dramatically improve the overall end-user experience
- The overall experience is a combination of application performance and system functionality
- AMD's holistic approach to system-wide innovation is aimed at dramatically improving the end-user experience
- Each segment has unique priorities, which drive an individualized AMD technology strategy for each

Greater Economic Opportunity for the Entire AMD Ecosystem

- EUE priorities defined by end users and OEMs; understood and enabled by AMD
- Improved EUE creates pull-through demand
- Demand creates growth opportunities for AMD OEMs and the entire ecosystem

Examples of EUE Priorities Today and through 2008

Enterprise

- Maximum performance/watt/dollar/square foot
- Power management on silicon and at the system level
- Minimum risk
- Reliability, availability, serviceability, manageability, recoverability
- Lower total cost of ownership through ease-of-management and power efficiency

Consumer

- No waiting, more multi-tasking
- Digital content that's as easy to use as the TV
- No-sacrifice portability
- Always connected, secure and private
- Emerging geography requirements

Digital Media (Converging with Consumer)

- Fluid content distribution
- Do-it-all convergence
- Always connected
- Personalized experience

The Foundation: Submicron Process Technology Leadership

Create industry-leading process technologies, using a highly efficient and cost-effective model, to enable industry leading microprocessors.

Distributed Early-Stage Development

- Partnerships
- In-house work
- Consortia
- University work

+

In-Fab Late-Stage Development

- New technologies run in-fab to accelerate learning and yield ramp
- “Mixed mode” manufacturing enabled by APM

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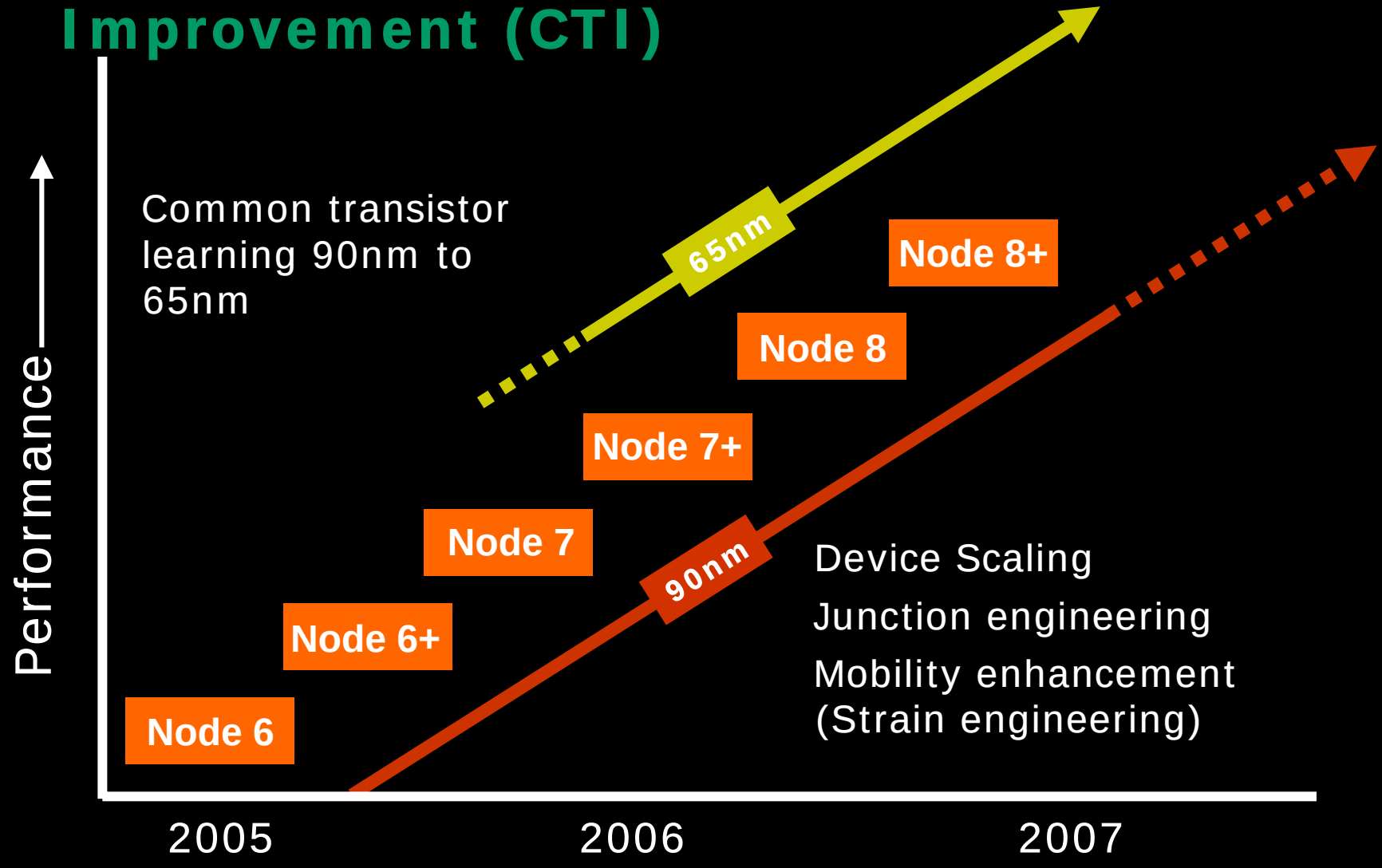
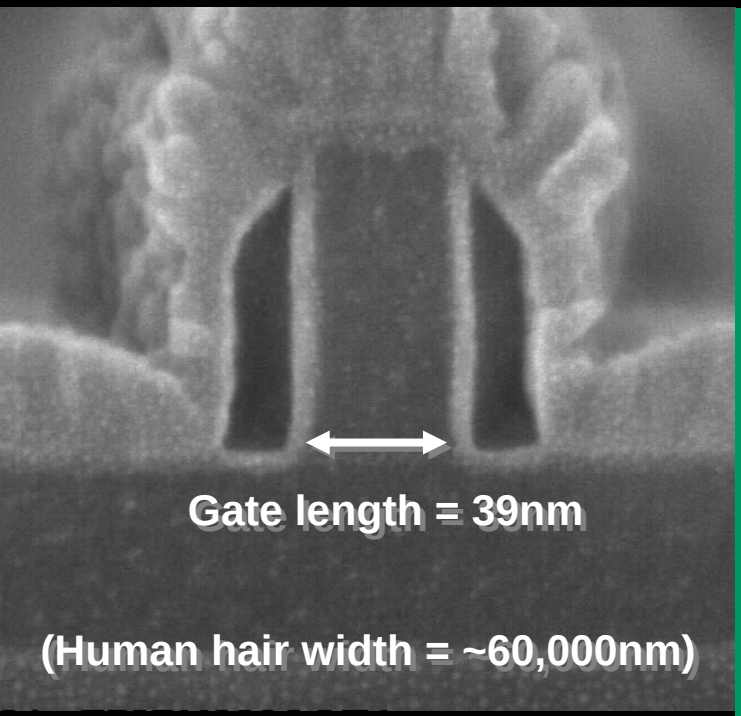
Continuous Technology Improvement

- Quarterly (or more) transistor upgrades
- Rapid, highest value improvements with minimal disruption
- Greatly reduced dependence on major technology generation transitions

AMD Continuous Technology Improvement (CTI)



Great Progress on 65nm Generation



High-performance 65nm technology SOI transistor generation with strain engineering

Transistor and interconnect development on schedule

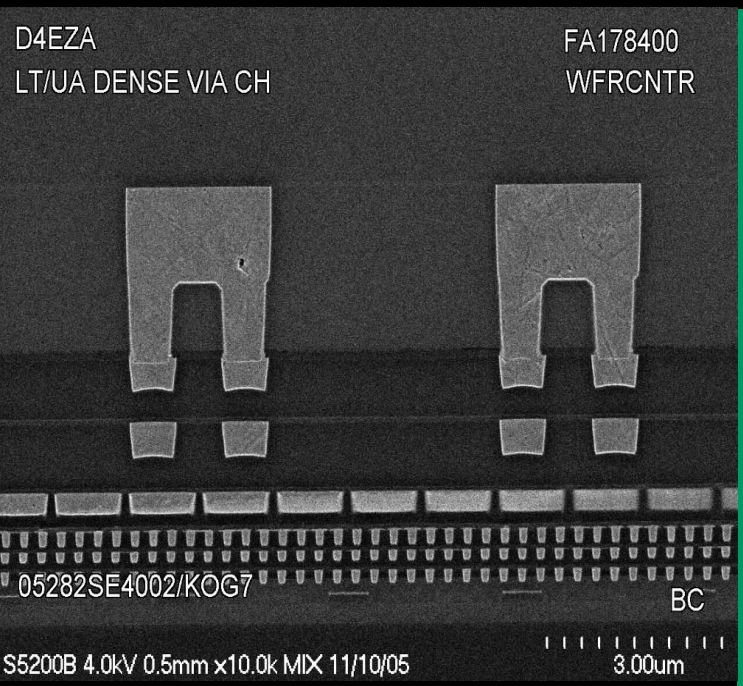
Yield metrics exceeding development plan
3rd generation of strained-silicon
Addition of Nickel Silicide
4th generation of low-k dielectric stack

65nm preliminary engineering silicon running in Fab 36 since June 2005

Plan to begin 65nm volume production in the second half of 2006

Plan to be substantially converted to 65nm in Fab 36 by mid-2007

45nm Development On Track



Enabling AMD solutions to remain at the forefront of performance, power-efficiency, and function

Making excellent progress on 45nm

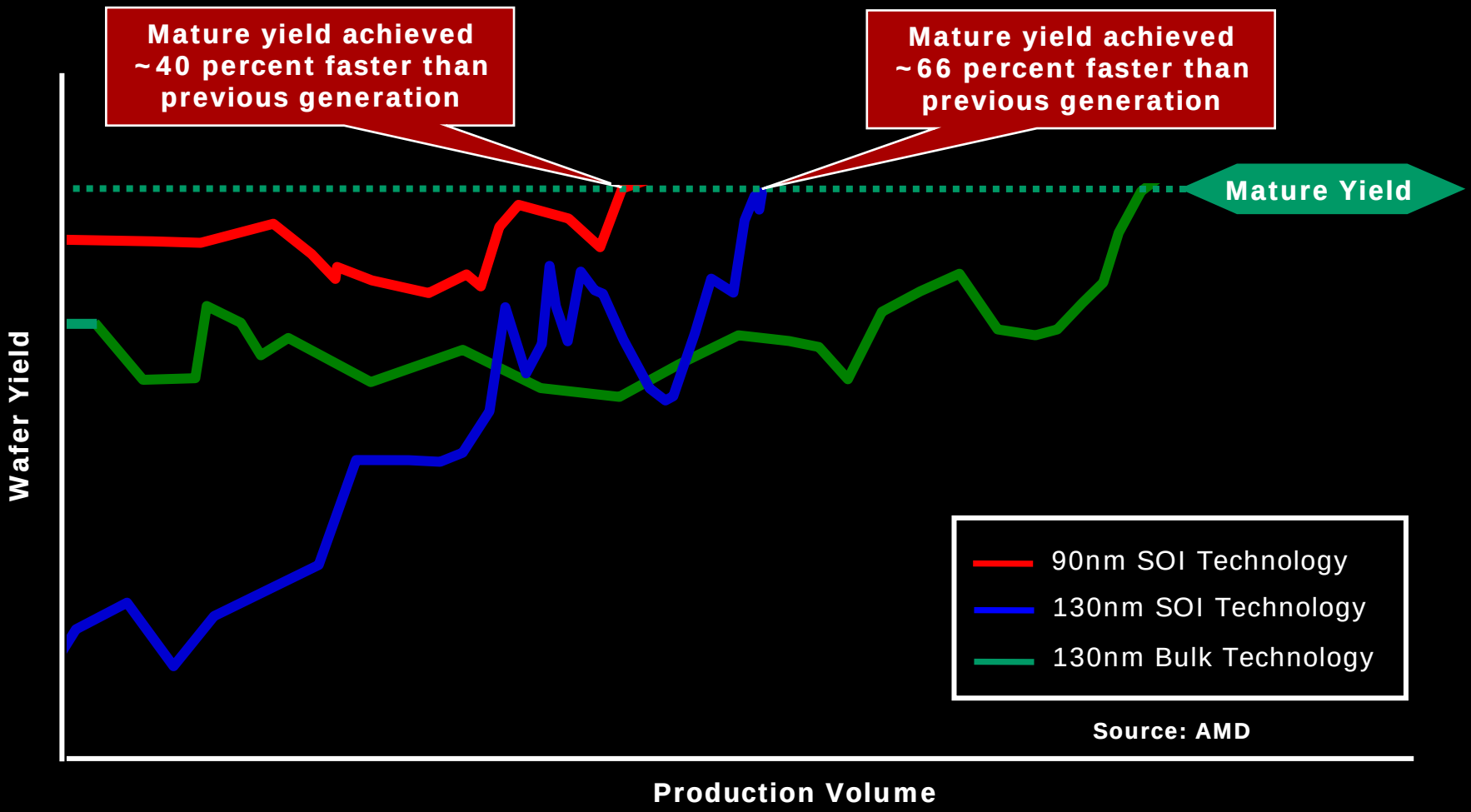
Working with IBM, we are on track for all internal milestones

Expect production starts in 2008

Technology will use SOI, building on and extending the success of previous generations

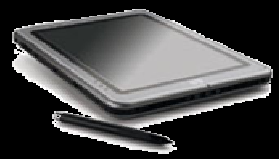
Will continue extensive use of strained silicon techniques to achieve industry leading performance characteristics

Faster Technology Transitions using AMD Automated Precision Manufacturing (APM)



Advancing the x86 Everywhere Vision

Workstations and Servers



PCs

Thin Clients

Emerging Devices

x86 Everywhere: Palmtops to Petaflops

AMD Geode™

AMD Turion™64 MOBILE TECHNOLOGY

AMD Sempron™

AMD 64 Athlon™

AMD 64 Athlon™X2

AMD 64 Athlon™FX

AMD 64 Opteron™

Using a Comprehensive *System-Wide* Innovation Approach

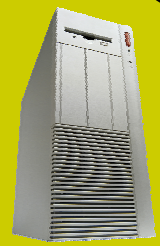
AMD x86 Based System / Device

Software

- Application Optimization
  Multithreading Advancement
  Developer Ecosystem Support
- OS Optimization
  OS-Level Functionality
  Virtual Machine Optimization
- Compiler Optimization
  BIOS Optimization
  Binary-Level Functionality

Silicon

- Chipsets
  Peripheral Interfaces
  Third-Party Silicon Solutions
- Instruction Set Architecture
  Microarchitecture
  Process Technologies



- It is now about much more than the microprocessor
- AMD is driving technology innovation at all system levels
- Optimizing the end-user experience using a system-wide innovation approach

AMD's Silicon-Level Innovation Priorities through 2008

CPU Silicon

Instruction Set Architecture

- Partitioned AMD PowerNow! technology
- FPU extensions
- Pacifica virtualization, Presidio security

Microarchitecture

- HyperTransport™ technology 3.0 and 4.0
- Multi-core architecture
- Scalable SMP architecture
- On-chip coprocessors

Process Technologies

- 65nm technology generation
- 3rd generation strained silicon
- 4th generation low-k stack
- 45nm technology generation

- Making the best, better: Direct Connect Architecture will continue to improve
- Selectively license coherent HyperTransport™ technology
- Ensuring compatibility while adding functionality
- Successful joint development agreement with IBM has been extended

AMD's Silicon-Level Innovation Priorities through 2008

System Silicon

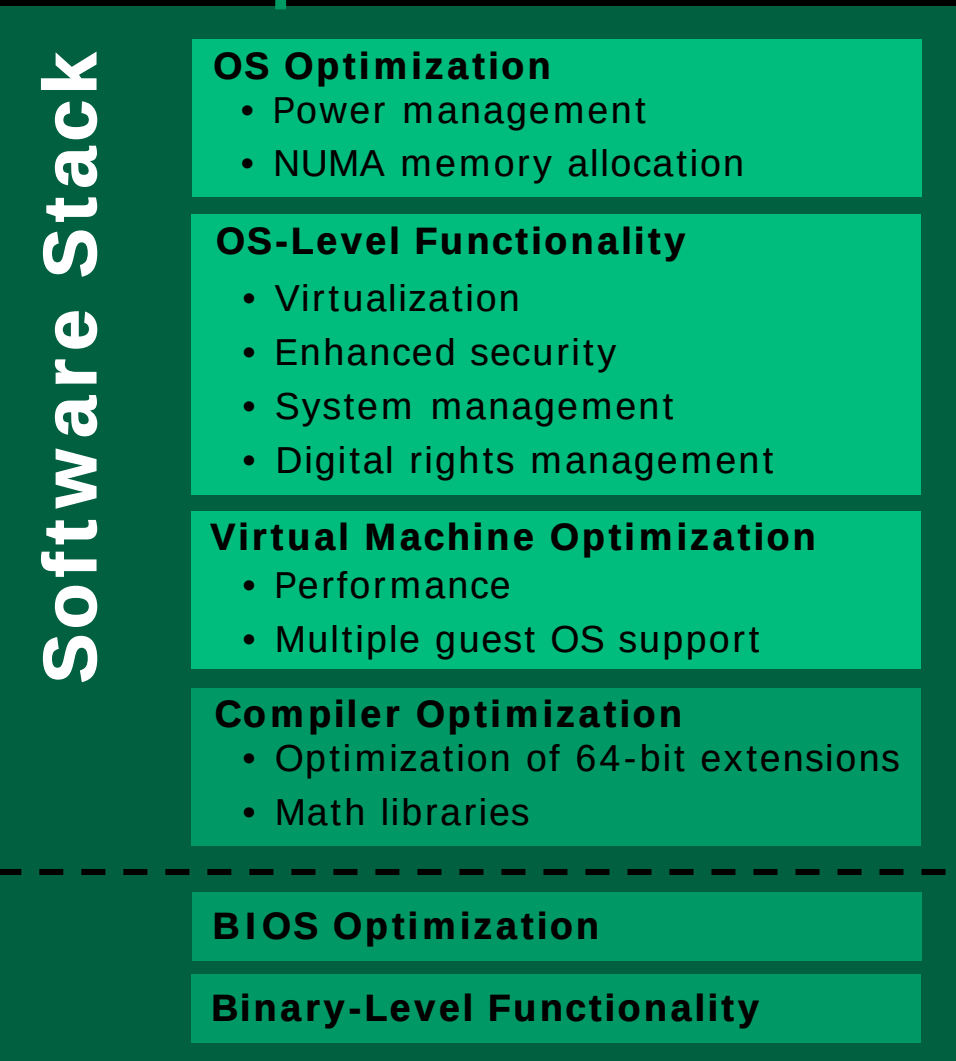
Chipsets
- DDR3, DDR4, FBDIMM, FBD2
- System resource management
- Mainframe class reliability
- Broader client support

Peripheral Interfaces
- PCI Express
- HyperTransport™ technology 3.0 and 4.0
- Systems management ports

Third-Party Silicon Solutions
- HORUS 32-processor system capability
- Off-chip coprocessors
- FPGA

- Enhanced chipset technologies for next-generation functionality
- Expanded interface options and improved throughput for better overall system performance
- Third-party silicon solutions for best-of-breed capabilities

AMD's Software-Stack Innovation and Optimization Priorities through 2008



- Extensive resources focused on ensuring full Microsoft® Windows® and Linux compatibility and performance
- AMD-enabled OS* functionality such as enhanced virus protection and virtualization
- Increasing focus on improved virtual machine performance for enterprise-class Java, .net, web services and blade PCs
- Aggressive optimization of compiler technology to ensure improved application performance

AMD's Software-Stack Innovation and Optimization Priorities through 2008

Software Stack

Application Optimization
- Over 300 ISVs, thousands of applications
- Top to bottom solution stacks
- Building deep relationships with key developers
- Licensing and certification

Multithreading Advancement
- Single-thread today, multi-threading based on customer need and application availability
- Thread-level parallelism (parallel applications) target

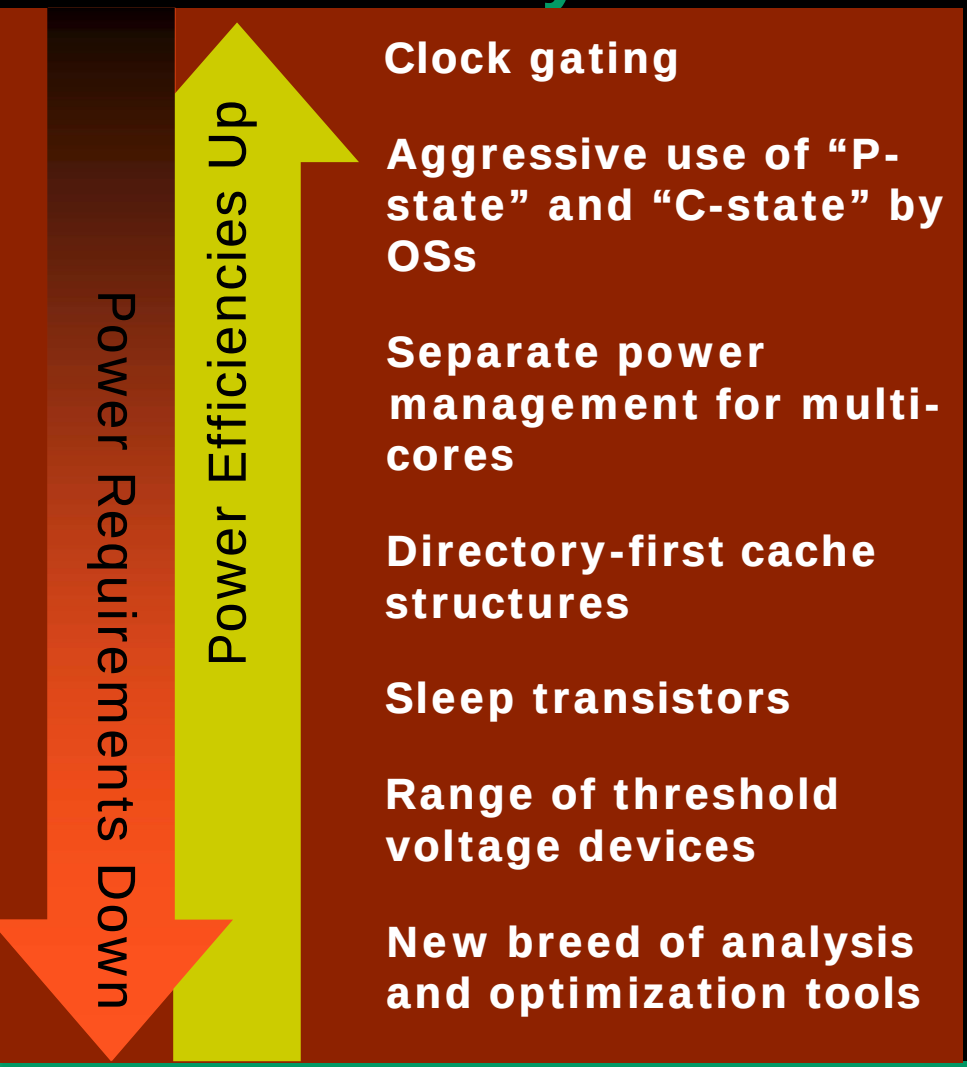
Developer Ecosystem Support
- Software reference designs and testing resources
- Programming environment support

- Aggressive ecosystem support programs to ensure optimum application performance on AMD64
- Strategy for consistent incremental advancements in multi-threaded application support
- Improved developer community tools, testing facilities and support

Future Cross Segment Growth Engine Technologies

- Mainframe functionality for the mainstream
- Digital Rights Management (DRM)
- Trusted Computing
- Increased power efficiency

Continued Leadership in Power Efficiency



- End-user demand for lower power solutions is growing rapidly across all segments, led by the enterprise
- AMD is a leader in power-efficiency today, but strong opportunities exist to drive further improvements
- As with performance, power efficiency advances must be driven simultaneously at multiple levels of the system
- AMD is innovating in a wide range of areas within the system, all offering strong and immediate power reduction “levers”

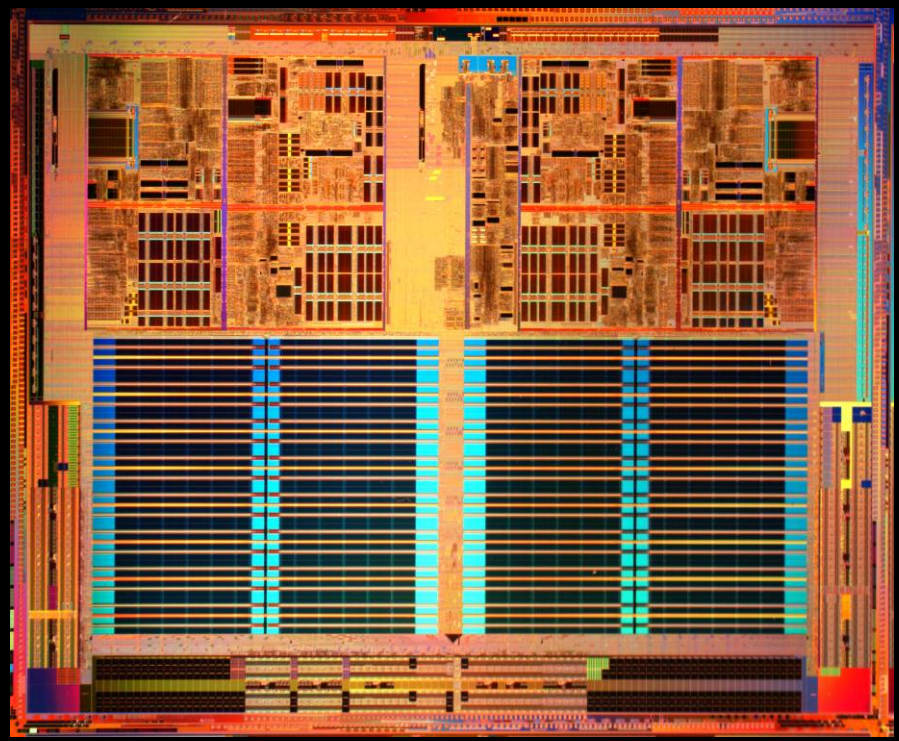

AMD

AMD64: What's Next

CPU Silicon

- Dual core mid-2006, quad core in 2007
- Infrastructure will support new core technology
- Supporting DDR2 at the right time for customers
- RDIMM is lowest cost and best thermal solution
- Leverages established HyperTransport™ 1 infrastructure
- Ongoing leadership in performance-per-watt
- Pacifica virtualization, Presidio security

Providing the next round of platform longevity for customers



AMD64 Goes “Big Iron”

Silicon

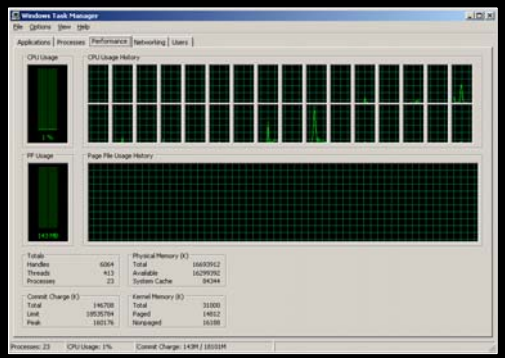
New chip developed by Newysis in close collaboration with AMD

Enables building large-scale, partitionable, distributed, symmetric multiprocessor (SMP) systems using AMD Opteron™ processors as building blocks

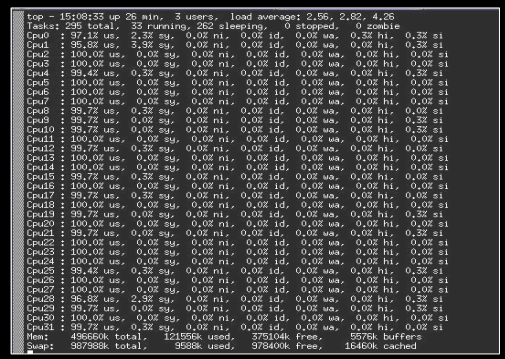
Scales the glueless SMP capabilities of AMD Opteron processors from 8 sockets to 32 sockets

Coherent Direct Connect for fault tolerant interconnect between systems

32-Way Windows Boot



32-Way Linux Boot



AMD 64 Opteron™

x 32

Fully capable mainframe replacement

AMD

Technologies Roadmap: Server and Workstation

	2005	2006	2007
Processor 	Dual Core PowerNow!	Dual Core Pacifica virtualization Presidio security Memory RAS	New core Multi-core Scale-up (32P+) L3 Cache Enhanced RAS I/O Virtualization HyperTransport™ 3.0
Chipset and Platform	PCI Express Gigabit Ethernet Serial ATA II Software RAID 5 Hardware Firewall	PCI Express Gigabit Ethernet TCP Offload Serial SCSI Serial ATA II Hardware RAID 5	HyperTransport 3.0 PCI Express 2 Gigabit Ethernet TCP Offload Serial SCSI Serial ATA II Hardware RAID 5 Fault Tolerant I/O

Technologies Roadmap: Workstation and Desktop

	2005	2006	2007
Processors	Dual Core Complete 64-bit offering	Pacifica virtualization Presidio security DDR2, Lower Power	New Core Larger Caches DDR3 HyperTransport™ 3.0
Performance (WS/Desktop) AMD 64 Opteron, AMD 64 Athlon FX, AMD 64 Athlon X2	SLI Graphics RAID	DDR2 'Aero Glass' graphics Pacifica virtualization Presidio security TPM	DDR3 HyperTransport 3.0 PCIe Gen II
Mainstream Stable Platform AMD 64 Athlon, AMD 64 Athlon X2, AMD Sempron	HD Audio GbE + WLAN		
	UMA + PCIe Option	CSIP Managed Platform	
Blade PCs, Thin Clients AMD 64 Athlon, AMD Sempron, AMD Geode™	UMA, sub-30W Low Noise Cooling Custom FF	Sub-10W DDR2 Pacifica virtualization Presidio security, TPM	DDR3 HyperTransport™ 3.0

Technologies Roadmap: Mobile

	2005	2006	2007
Processors 	25W / 35W / 62W TDP 64-bit Mobility	Dual Core DDR2 25W / 35W / 62W TDP Pacifica virtualization Presidio security	New Core DDR3 <35W TDP ~60W TDP Larger / Shared caches
Chipsets and Platform	PCI Express DX9 UMA High Def Audio SATA Integrated LAN (10 / 100 / GbE) 802.11 a / b / g	Microsoft® Windows® Vista™ Ready UMA SATA2 / AHCI Integrated WLAN (802.11 a / b / g) 802.11n	Next Generation Graphics Next generation wireless

Positioned for Success: Holistic Innovation, Rapid Time to Market

- Aggressively moving forward on innovations designed to create the right end-user experience
- Flawlessly executing on strategies to extend our proven technology leadership further, faster
- Expanding our scope to lead not only in silicon, but also in platforms and solutions

* Enhanced Virus Protection (EVP) is only enabled by certain operating systems including the current versions of Microsoft® Windows®, Linux, Solaris and BSD Unix. After properly installing the appropriate operating system release, users must enable the protection of their applications and associated files from buffer overrun attacks. Consult your OS documentation for information on enabling EVP. Contact your application software vendor for information regarding use of the application in conjunction with EVP. AMD and its partners strongly recommend that users continue to use third party anti-virus software as part of their security strategy.

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